



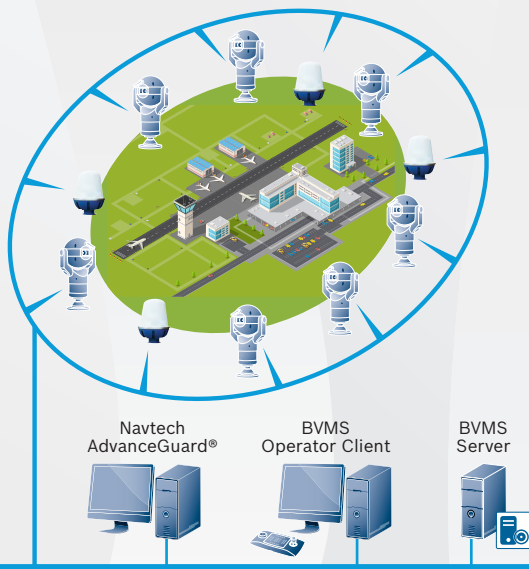
**BOSCH**

Invented for life

# Integrated Security, Safety and Video Management Solution

## Radar Solution

# Bosch Security and Safety Systems and Navtech Radar



- ▶ Bosch Video Management System (BVMS) meets Navtech AdvanceGuard® High Definition Radar (HDR) – a reliable and comprehensive solution for continuous and automatic perimeter security surveillance
- ▶ Reliable detection of intruders in any light conditions and weather
- ▶ No blind spots using multiple Navtech AdvanceGuard® HDRs and Bosch MIC IP cameras
- ▶ Detection, tracking, classification and recording of multiple targets simultaneously
- ▶ Low false alarm rate that gives the optimum performance, both in terms of detection and response
- ▶ Easy configuration of multiple radars and cameras using rule-based graphical interface



Integrating the Bosch Video Management System (BVMS) with Bosch MIC IP cameras and the Navtech AdvanceGuard® High Definition Radar (HDR) provides you with a reliable and comprehensive solution that delivers continuous and automatic perimeter security surveillance. This all-light and all-weather solution reliably detects intruders before they can enter your site. AdvanceGuard's patented High Definition Radar technology captures and separates objects down to 25 cm in size at distances up to 3 km. The radar tracks multiple objects simultaneously and displays objects detected on a map showing location, size, speed and bearing.

If buildings or accidented terrain hamper line of sight, multiple radar units can be used to ensure 100 % coverage. The rule-based configuration system allows easy setup of detection zones and alarm priorities for multiple radar units and cameras.

Navtech's Accutrack technology directs the Bosch MIC IP cameras to collect video footage of moving objects and sends radar object metadata to the BVMS for storage and processing in BVMS workstation scripts. AdvanceGuard® selects the camera that provides the best video shot of objects of interest.

The customer can also record the radar map with moving objects as a camera stream in BVMS and search the radar object metadata from within BVMS.

Bosch MIC IP cameras are built and tested for the harshest outdoor conditions. Advanced image processing algorithms minimize image noise even in very dark or high contrast scenes and sophisticated image compression generates a low bitrate video data stream thus minimizing recording storage needs. The precision positioning system of the MIC IP cameras is directly controlled by the Accutrack technology to track moving objects in real time and capture high quality images.

Radar detection is now enhanced with automatic HD video verification in BVMS!

## Compatibility

Navtech Radar	Bosch products
<b>Navtech AdvanceGuard® High Definition Radar (HDR)</b> - HDR 100 Series - HDR 200 Series - HDR 300 Series	<b>BVMS v5.5.5 or newer</b>  <b>Bosch MIC IP cameras</b> - MIC-7130-Px4xx - MIC-7230-Px4xx - MIC-612

## Applications / Vertical Markets

Dependable object detection outdoor in challenging light conditions and in any weather condition, as Navtech AdvanceGuard® HDRs are not hampered by snow, rain or fog. From small sites to large complex compounds:



Airport surveillance



Critical national infrastructure



Commercial installations

## Key features

### Quick, real-time and accurate detection, tracking and recording

Any intrusion detected by a Navtech AdvanceGuard® HDR will route video from the nearest Bosch camera to the BVMS operator and draw immediate attention thanks to AdvanceGuard's Accutrack technology. BVMS automatically presents the proper camera sequence and follows the object on the move detected by the radar - accurate, fast and controlled positioning as well as object tracking offered via absolute positioning of Bosch cameras. Moreover, BVMS collects, presents and records Navtech AdvanceGuard® HDRs provided metadata of the intruding object.

### Low false alarm rates

The system's low false alarm rate is key to its effectiveness. Too many false alarms result in the operators losing trust in the system and in some cases disabling it altogether. The combined solution catches all real threats and provides a low

false alarm rate that gives optimal performance, both in terms of detection and response - a typical well-tuned installation will, on average, produce only one false alarm per radar per day.

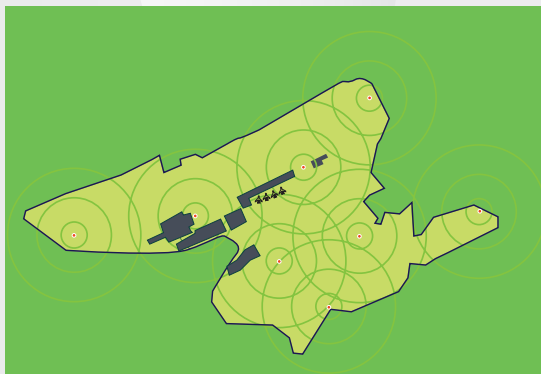
### Multiple threat visualization

BVMS can visualize video scenes of multiple threats simultaneously by automatically adapting the layout of the BVMS operator screen when AdvanceGuard's Accutrack detects multiple intrusions at the same time.

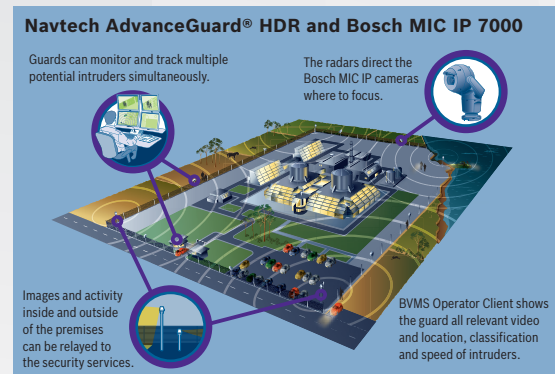
### Ease of use

The combined solution is easy to use thanks to BVMS's intuitive graphical interface. Moreover, the Navtech AdvanceGuard® HDR system is easy to configure using the rule-based graphical interface as well. It typically takes just 2 hours of training for a user to be able to use the Navtech AdvanceGuard® HDR system effectively to its full capability.

## Complete coverage both within and outside the perimeter



No blind spots with Navtech's Distributed Radar System



Dependable and flexible perimeter protection

**The Bosch division Security and Safety Systems** is a leading global supplier of security, safety, and communications products, solutions and services. Protecting lives, buildings and assets is our aim. The product portfolio includes video surveillance, intrusion detection, fire detection and voice evacuation systems as well as access control and management systems. Professional audio and conference systems for communication of voice, sound and music complete the range. Bosch Security and Safety Systems develops and manufactures in its own plants across the world. Additional information can be accessed at [www.boschsecurity.com](http://www.boschsecurity.com)

Visit [www.ipp.boschsecurity.com](http://www.ipp.boschsecurity.com) for details on the Bosch Integration Partner Program

**Navtech Radar** is a world leading innovator and multi-award winning designer and manufacturer of commercially deployed radar detection solutions. Our ground-breaking technology is utilised by clients across many industry sectors, from Perimeter Security Surveillance and Industrial Automation to Traffic Incident Detection. Navtech has harnessed the power of the latest technology for commercial radar applications at a fraction of the cost, and to the most exacting quality and standards. Renowned for investing heavily in innovation and R&D, Navtech Radar has earned an unrivalled reputation for products that are high performance, robust and extremely reliable. Our systems are often used in mission critical applications where safety and security are vital.

For more information visit [www.navtechradar.com](http://www.navtechradar.com).